CLAIMS

What is claimed is:

1. A method of controlling heaters of an electric cooking apparatus, the method comprising:

detecting a temperature of a cooking cavity; and

operating the heater according to preset power-ON and power-OFF periods to allow the heaters to be maintained at a temperature within a range around a certain temperature when the temperature of the cooking cavity reaches a set temperature.

2. The method as set forth in claim 1, wherein each of the preset power-OFF periods is set to a period ranging from a first point, when power to the heaters is cut off, to a second point, when a surface temperature of heaters decrease by a certain amount or less.

3. The method as set forth in claim 1, wherein each of the preset power-ON periods is set shorter than each of the preset power-OFF periods when the temperature of the cooking cavity reaches the set temperature.

4. The method as set forth in claim 1, wherein each of the power-OFF periods is set to be 1.5 to 3 times each of the power-ON periods.

5. A method of controlling heaters of an electric cooking apparatus, comprising:

detecting a temperature of a cooking cavity; and

performing a temperature increasing mode in which a supply of power and a cutoff of power to the heaters are alternately performed while increasing a ratio of a power-OFF period to a power-ON period if the detected temperature of the cooking cavity is not equal to a set temperature, and performing a temperature maintaining mode in which the heaters are operated according to preset power-ON and power-OFF periods to be maintained at a temperature within a certain range around a certain temperature if the detected temperature of the cooking cavity reaches the set temperature.

6. The method as set forth in claim 5, wherein each of the preset power-OFF periods is set to a period ranging from a first point, when power to the heaters is cut off, to a second point, when a surface temperature of heaters decreases by a certain amount or less.

7. The method as set forth in claim 5, wherein each of the preset power-ON periods is set shorter than each of the preset power-OFF periods when the temperature of the cooking cavity reaches the set temperature.

8. The method as set forth in claim 7, wherein each of the power-OFF periods is set to be 1.5 to 3 times each of the power-ON periods.

9. An electric cooking apparatus, comprising:

heaters supplying heat to a cooking cavity; and

a control unit controlling the heaters to be operated according to preset power-ON periods and power-OFF periods so as to allow the heaters to be maintained at a temperature within a range around a certain temperature when the temperature of the cooking cavity reaches a set temperature.

10. The apparatus according to claim 9, wherein each of the preset power-OFF periods is set to a period ranging from a first point, when power to the heaters is cut off, to a second point, when a surface temperature of heaters decreases by a certain amount or less.

11. The apparatus according to claim 9, wherein each of the preset power-ON periods is set shorter than each of the preset power-OFF periods when the temperature of the cooking cavity reaches the set temperature.

12. The apparatus according to claim 9, wherein each of the power-OFF periods is set to be 1.5 to 3 times each of the power-ON periods.

13. A method of controlling heaters of an electric cooking apparatus, comprising:

inputting a cooking start signal;

measuring a temperature of a cooking cavity; and

comparing a set temperature T2 with the temperature of the cooking cavity, wherein if the set temperature T2 is equal to a detected temperature of the cooking cavity, performing a temperature maintaining mode, and wherein if the set temperature T2 is not equal to the detected temperature of the cooking cavity, performing a temperature correcting mode.

14. The method according to claim 13, wherein in the temperature maintaining mode a surface temperature of the heaters is maintained within a certain range.

15. The method according to claim 13, wherein the temperature correcting mode is divided into a temperature decreasing mode and a temperature increasing mode.

16. The method according to claim 15, wherein in the temperature decreasing mode, to decrease the temperature of the cooking cavity, a heater unit cuts off power from the heaters until the temperature of the cooking cavity reaches the set temperature T2.

17. The method according to claim 15, wherein in the temperature increasing mode, if the temperature of the cooking cavity is lower than half of the set temperature T2, a heater unit controls power to be continuously supplied to the heaters, and wherein if the temperature of the cooking cavity is equal to or higher than half of the set temperature T2 and lower than the set temperature T2, the heater unit controls power to be alternately supplied and cut off to the heaters according to information about power-ON periods and power-OFF periods stored in a power control information storage unit, with each of the power-ON periods being longer than each of the power-OFF periods.